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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,661	09/08/2003	Hiroshi Kashiwagi	KON-1821	2782

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LUCAS & MERCANTI, LLP  
475 PARK AVENUE SOUTH  
15TH FLOOR  
NEW YORK, NY 10016

EXAMINER

CHEA, THORL

ART UNIT PAPER NUMBER

1752

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/657,661

Applicant(s)

KASHIWAGI ET AL.

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2006 and 10 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,6 and 10-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6 and 10-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is responsive to the communication on June 20, 2006 and July 10, 2006.
2. Claims 1-4, 6, 10-13 are pending in this instant application; claims 5, 7-9 have been canceled.
3. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. However, the rejections set forth in the previous action is maintained, and reproduced such as shown below for the applicant's convenience.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6, 10, 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Arai et al (US Patent No. 6,090,538). See examples 3, columns 53-54, wherein the silver iodobromide grains is prepared in the presence of

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4-hydroxy-6-methyl-1,3,3a, 7-tetrazaidene and the preparation of organic fatty acid silver emulsion such as silver salt of behenic acid and the reducing agent of formula (R-I) in column 60, claim 7 and column 36, Table 1. The 4-hydroxy-6-methyl-1,3,3a, 7-tetrazaidene is considered as electron trapping electron used in the applicants' disclosure on page 85, silver halide emulsion 3. Arai et al discloses the material having composition as claimed except does not show the requirement  $S_B/S_A \leq 0.2$  presented in the claimed invention. However, this requirement is related to process of the material, and it would be considered as inherent to the material of Arai et al due the similarity of the composition.

7. Claims 11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al as applied to claims 1-4, 6, 10, 12 above, and further in view of Maeda et al (US 2002/0042031 A1). Maeda et al discloses silver salt of fatty acid having grains size of 0.05 to 1.5 microns on page 27, claim 13, and chemical sensitizer on page 11, [0070] to [0093]. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the silver salt of fatty acid having grains size disclosed in Maeda et al in the material of Arai et al with an expectation of achieving a material exhibiting enhanced sensitivity and reduced fogging.

#### ***Response to Arguments***

8. Applicant's arguments filed July 10, 2006 have been fully considered but they are not persuasive of the reason set forth the rejection set forth above. The applicants' argument is based on the Declaration on July 10, 2006 by Soc Man Ho Kimura. The applicants argue that the Declaration refuted the Examiner's prima facie case of inherency and shown that Arai does not meet the claimed limitation.

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It is the Examiner's position that the invention as claimed is not anticipated by Arai et al, but at least found prima facie obvious over Arai et al. The silver halide emulsion taught in Arai et al in Example 3, lines 61 to column 54, lines 1-16 is prepared by adding the hexacyanoferrate (III) and hexachloroiridium (III) at the same time with the stating of addition of silver nitrate. These hexacyanoferrate (III) and hexachloroiridium (III) are therefore added during the nucleus formation. Arai et al further states that "Thereafter, 0.3 g of 4-hydroxy-6-methyl-1,3,3a, 7-tetrazaidene was added and the pH was adjust to 5 with sodium hydroxide to obtain cubic silver iodobromide grains having grain size of 0.06 micron." Arai et al disclose the adding of metal doping during nucleus formation and 4-hydroxy-6-methyl-1,3,3a, 7-tetrazaidene after the adding of hexacyanoferrate (III) and hexachloroiridium (III), including during the grain growth. Arai et al use the term "thereafter" which encompass any step after adding the metal dopant, which is in contrary from the applicants conclusion that they note that "this dopant is added at the time after nuclear formation and after grain growth". Therefore, the time of adding the 4-hydroxy-6-methyl-1,3,3a, 7-tetrazaidene to the silver halide emulsion is at least found obvious to the worker of ordinary skill in the art.

The Declaration under 37 CFR 1.132 fails to overcome the rejection above. First, it is unclear how to make the material or when to added the 4-hydroxy-6-methyl-1,3,3a, 7-tetrazaidene compound to the silver halide emulsion. See the statement of the Declaration on page 3 "I note the compound R-I-5 in Table 1 of Arai overlaps Formula (1) of the present invention. Thus, I choose this hydrazine compound when making the light-sensitive layer B of Arai. Otherwise, I followed Example 3 of Arai to make a photothermographic material. I labeled this material Sample R105". Therefore, it is unclear with respect to the ingredient contained in the material.

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Second, the Declaration appears contradict with the specification disclosure and has little probative value. The applicants are referred to results shown in the specification Table 1, silver halide emulsions 1-3 which contains the metal dopant inside the silver halide grains and produce the sensitivity  $S_A/S_B \leq 0.2$  while the silver halide emulsion taught in Arai et al contains metal dopant inside the silver halide emulsion produce the  $S_A/S_B$  outside the scope of the claimed invention. Therefore, the Declaration is not consistent with the specification disclosure. Accordingly, the argument and evidence as presented fails to overcome the rejection set forth above, and the rejections are maintained.

### *Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Tchea *tin*  
2006-08-16

*Thorl Chea*  
Thorl Chea  
Primary Examiner  
Art Unit 1752